

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

<b>In the Matter of</b>	)	
	)	
<b>Amendment of Part 2 of the</b>	)	<b>ET Docket No. 00-258</b>
<b>Commission’s Rules to Allocate</b>	)	
<b>Spectrum Below 3 GHz for Mobile</b>	)	
<b>And Fixed Services to Support the</b>	)	
<b>Introduction of New Advanced Wireless</b>	)	
<b>Services, Including Third Generation</b>	)	
<b>Wireless</b>	)	
	)	
<b>Amendment of Section 2.106 of the</b>	)	<b>ET Docket No. 95-18</b>
<b>Commission’s Rules to Allocate</b>	)	
<b>Spectrum at 2 GHz for Use By the</b>	)	
<b>Mobile-Satellite Service</b>	)	
	)	
<b>The Establishment of Policies and</b>	)	<b>IB Docket No. 99-81</b>
<b>Service Rules for the Mobile-Satellite</b>	)	
<b>Service in the 2 GHz Band</b>	)	
	)	
<b>Petition for Rule Making of the Wireless</b>	)	<b>RM-9498</b>
<b>Information Networks Forum</b>	)	
<b>Concerning the Unlicensed Personal</b>	)	
<b>Communications Service</b>	)	
	)	
<b>Petition for Rule Making of UTStarcom,</b>	)	<b>RM-10024</b>
<b>Inc., Concerning the Unlicensed</b>	)	
<b>Personal Communications Service</b>	)	

**To: The Commission**

**COMMENTS OF  
THE RURAL TELECOMMUNICATIONS GROUP**

The Rural Telecommunications Group (“RTG”),<sup>1</sup> by its attorneys, respectfully submits these comments in response to the Further Notice of Proposed Rulemaking (“*Further Notice*”)

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<sup>1</sup> The Rural Telecommunications Group is a group of rural telecommunications providers who have joined together to speed the delivery of new, efficient, and innovative telecommunications technologies to the populations of remote and underserved sections of the country. RTG's members provide wireless telecommunications services, such as

released by the Federal Communications Commission (“FCC” or “Commission”) in the above-captioned proceeding.

RTG’s comments are limited to the future use of the 1910-1930 MHz band. RTG opposes the Commission’s proposal to license this spectrum for full power Third Generation (“3G”) services.<sup>2</sup> This band should remain as an unlicensed, low power guard band to protect full power PCS operations. RTG supports UTStarcom’s and others’ requests for amendments to the Commission’s rules that would permit the 1910-1920 MHz band to be used for community wireless voice and data networks and other low power services. The Commission should amend its rules and allow for a change in the spectrum etiquette of the 1910-1920 MHz band to allow for the provision of low power mobile voice and data services in this band. With these changes, this unlicensed spectrum could be used to provide cost-effective mobile voice service in underserved areas due to the readily available equipment now used in this band in many other countries.

At the inception of PCS, the Commission had a vision of the many potential innovative wireless services that became the basis of its PCS allocations.

Proposed services and devices range from advanced wireless replacements for ordinary telephones to radio communications devices capable of sending and receiving voice and data to and from virtually anywhere. Specific kinds of PCS services and devices are expected to include advanced forms of cellular telephone service, *advanced digital cordless telephone service*, portable facsimile services, *wireless PBX services*, and wireless local area network (LAN) services, among others. These new services and devices can operate through the existing public

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cellular telephone service, Personal Communications Services ("PCS") and ("LMDS"). RTG's members are all affiliated with rural telephone companies or are small businesses.

<sup>2</sup> *In re Amendment of Part 2 of the Commission’s Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems*, Memorandum Opinion and Order and Further Notice of Proposed Rulemaking, ET Docket No. 00-258, FCC 01-224 (August 20, 2001) (“*Further Notice*”).

switched network or through alternative local networks such as cable television systems.<sup>3</sup>

Today, the promise of innovative PCS service in the unlicensed bands is coming to fruition. Now that the Commission is faced with concrete uses of this band, it should not change direction with a reallocation that promises little in the way of either 3G expansion or any full power operations.

## **I. THE COMMISSION SHOULD NOT REALLOCATE THE 1910-1930 MHz BAND FOR FULL POWER OPERATIONS**

RTG does not support the Commission's proposal to reallocate any portion of the 1910-1930 MHz band for new advanced wireless services or for incumbents displaced by advanced wireless services.<sup>4</sup> The Commission's proposal does not even begin to suggest how this guard band could be used for other than the low power operations that are now developing.

This spectrum should remain unlicensed to provide for targeted PCS services to pockets of dispersed populations across the country. The 1910-1930 MHz band is ideally suited to serve smaller communities who have yet to experience PCS service. To date, it has not been cost effective to serve isolated pockets of populations and rural areas. By keeping the band unlicensed, rural carriers and others will have the opportunity to create local PCS service that fills in the streets, blocks, neighborhoods, and communities that have not been of interest to full power PCS licensees. The current unlicensed protocols do not allow for just these types of operations because they result in products that are unique per manufacturer and that are too expensive for operators to deploy on a community wide basis.

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<sup>3</sup> See *Amendment of the Commission's Rules to Establish a New Personal Communications Service*, Second Report and Order, 8 FCC Rcd 7700 at ¶ 22 (1993). (*emphasis added*).

<sup>4</sup> *Further Notice* at ¶ 11.

The record in this proceeding is already replete with expressions of interest to use the 1910-1920 MHz band for low power PCS voice operations. RNI Communications Corp. (“RNI”) notes in its comments that it has never been able to afford wireless licenses sold at an FCC auction due to its small business organization. The most cost effective way for RNI to provide wireless local service to the “last mile” would be to provide voice services in the 1910-1920 MHz band. If the Commission decided to simply license this spectrum and hold an auction, companies like RNI could not afford to bid on a license to only serve a small license area.<sup>5</sup>

Aviatel, Inc. (“Aviatel”) explains that even the smallest geographic license size has been too large for rural and smaller carriers to bid upon. Instead, Aviatel suggests leaving the spectrum unlicensed and amending the Commission’s rules to allow voice transmissions in the 1910-1920 MHz band, permitting smaller companies to provide local wireless service in underserved areas.<sup>6</sup>

Panasonic, a large manufacturer of wireless equipment, also agrees that the 1910-1920 MHz band should remain unlicensed.<sup>7</sup> It notes that Panasonic telecommunications equipment is very popular with small businesses in the U.S. as well as in other countries. Panasonic is producing its equipment in high volumes in Japan and many other countries. Its low power voice equipment could provide a cost effective, in-building wireless solution if it were allowed to be sold in the U.S.<sup>8</sup>

According to Robert Hart, an experienced member of the telecommunications industry, licensing this spectrum, “would result in large geographic license areas being sold at prices that

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<sup>5</sup> RNI Comments at 1-2.

<sup>6</sup> Aviatel Comments at 1-2.

<sup>7</sup> Panasonic Comments at 1.

<sup>8</sup> *Id.*

‘real’ small businesses could not afford.”<sup>9</sup> He also comments that the 1910-1920 MHz band should remain unlicensed and the Commission should allow carriers to implement wireless voice operations to serve small communities, which would otherwise go unserved.<sup>10</sup>

Quantum Communications, providing low cost International Prepaid Long Distance service in New York City, commented that it seeks the deployment of a wireless neighborhood system for the last mile to reach low-income neighborhoods. Current wireless license holders have the opportunity to serve these areas and have chosen not to do so. Quantum argues that the 1910-1920 MHz band should remain unlicensed and the spectrum etiquette should be relaxed.<sup>11</sup>

## **II. THE COMMISSION SHOULD AMEND ITS RULES TO ALLOW FOR VOICE SERVICE IN THE 1910-1920 MHz BAND**

The FCC should amend its rules to allow for voice and data services in the 1910-1920 MHz band. The 1910-1920 MHz band is currently reserved for unlicensed asynchronous (data) transmissions. The FCC has correctly found little use by data services in the 1910-1920 MHz band to date.<sup>12</sup> The Commission should amend its rules to open the 1910-1920 MHz band for voice transmissions in order to ensure that scarce mobile spectrum is put to efficient use.

Voice transmissions in the 1910-1920 MHz band would better reflect the global use of the band for low power voice services. Other countries in Latin America and Asia already use the 1910-1920 MHz band for low power voice and data application PCS. In these countries, Personal Handphone System (PHS), which is used in Asia, and Digital European Cordless Telephone (DECT), which is used mostly in Europe, may be used for wireless local loop applications. If the Commission allows for PCS voice transmissions in the 1910-1920 MHz

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<sup>9</sup> Robert Hart Comments at 2.

<sup>10</sup> *Id.*

<sup>11</sup> Quantum at 1.

<sup>12</sup> *Further Notice* at ¶ 10.

band, this will harmonize the band's allocation with that of many other countries. As the Commission well knows, with spectrum harmonization, comes lower infrastructure costs and the greater availability of consumer equipment. This rule change would permit smaller providers, or consumers themselves, to create a wireless community networks with very cost efficient equipment. RTG understands that equipment costs for voice operations at 1910-1920 MHz band may be three times less than current voice equipment in the 1920-1930 MHz band through the use of globally standard equipment. Again, this is due to the extensive use of the 1910-1920 MHz band in other countries for low power voice operations.

While the 1910-1920 MHz band is currently underused by data transmissions, the Commission has already received multiple waiver requests to use the band for voice. For example, the Commission has been made aware of a growing interest in using this band for targeted PCS operations. Alaska Power & Telephone Company ("AP&T") has filed a petition for waiver of the Commission's rules to provide fixed and mobile wireless telephone service in rural Alaska. In certain parts of Alaska, communities are not currently being served by an ILEC. AP&T's proposed service would expand service for existing telephone customers in rural Alaska and provide new service for those who are unserved.<sup>13</sup> Drew University has also requested a waiver of the Commission's rules in order to provide voice service to its suburban New Jersey campus.

RTG fully supports the petitions for rule changes sought by UTStarcom and WINFORUM. With these changes in spectrum etiquette rules, isolated buildings, pockets of populations and rural areas of the country will have the opportunity for local mobile service. UTStarcom proposes to provide community wireless voice and data networks and other low

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<sup>13</sup> AP&T Petition at ¶ 2.

power services to areas that are traditionally underserved.<sup>14</sup> As indicated in WINFORUM's Petition for Rulemaking, allowing voice communications in the 1910-1920 MHz band gives smaller service providers 20 MHz of spectrum to provide a higher density of service without interference problems due to low power operations.<sup>15</sup> The FCC, therefore, should amend its rules to change the spectrum etiquette in this band to allow for fixed and mobile wireless voice service into rural areas and at specific sites in pockets of isolated populations.

### **III. CONCLUSION**

The Commission should not reallocate the 1910-1930 MHz band from low power, unlicensed PCS to 3G or other licensed operations. Today, companies such as UTStarcom are bringing the promise of innovative PCS operations in these bands to reality. Instead of stopping innovation in its tracks, the Commission should modify its rules to allow for more intensive unlicensed use of the 1910-1920 MHz band as urged by WINFORUM, UTStarcom and others.

Respectfully submitted,

**THE RURAL TELECOMMUNICATIONS GROUP**

By: \_\_\_\_\_/s/\_\_\_\_\_

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<sup>14</sup> UTStarcom Petition at 3-4.

<sup>15</sup> WINFORUM Petition at 8.